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                                                                    99
Ile Ile Asn Thr Ser Ile Leu Asn Leu Arg Tyr Glu Ser Asn His Leu
     15
                         20
atc gac ctg tct cgc tac gct tcc aaa atc aac atc ggt tct aaa gtt
                                                                    147
Ile Asp Leu Ser Arg Tyr Ala Ser Lys Ile Asn Ile Gly Ser Lys Val
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30				35				40				45	
											ctg Leu 60		195
							-				aac Asn		243
											aaa Lys		291
											tgc Cys		339
											atc Ile		387
											ttc Phe 140		435
											atc Ile		483
_					_	_					atc Ile		531
	_	_	_	_		_			_		atc Ile		579
											act Thr		627
											ctg Leu 220		675
											ggt Gly		723
											tac Tyr		771
											aat Asn		819
											gtt Val		867

act acc aac a				Ser								915
atc atc aag a Ile Ile Lys I			Gly									963
aat gat cgt of Asn Asp Arg 320												1011
ctg gct acc a Leu Ala Thr A 335												1059
ctg gaa atc (Leu Glu Ile 1 350	Pro Asp V	gtt ggt Val Gly 355	aat Asn	ctg Leu	tct Ser	cag Gln 360	gta Val	gtt Val	gta Val	atg Met	aaa Lys 365	1107
tcc aag aac o Ser Lys Asn i				Asn								1155
gac aac aat o Asp Asn Asn (Gly									1203
aat atc gct a Asn Ile Ala 1 400												1251
cgt tcc tct o Arg Ser Ser 1 415												1299
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Ser Arg Tyr 1	-	Lys Ile			Gly	Ser	Lys	Val 45		Phe	Asp	
Pro Ile Asp 1	Lys Asn G	In Ile		Leu	Phe	Asn	Leu 60	-	Ser	Ser	Lys	
Ile Glu Val : 65	_		Ala	Ile	Val	Tyr 75		Ser	Met	Tyr	Glu 80	

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Asn Phe Ser Thr Ser Phe Trp Ile Arg Ile Pro Lys Tyr Phe Asn Ser
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Ile Ser Leu Asn Asn Glu Tyr Thr Ile Ile Asn Cys Met Glu Asn Asn
           100
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Ser Gly Trp Lys Val Ser Leu Asn Tyr Gly Glu Ile Ile Trp Thr Leu
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Gln Asp Thr Gln Glu Ile Lys Gln Arg Val Val Phe Lys Tyr Ser Gln
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Met Ile Asn Ile Ser Asp Tyr Ile Asn Arg Trp Ile Phe Val Thr Ile
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Thr Asn Asn Arg Leu Asn Asn Ser Lys Ile Tyr Ile Asn Gly Arg Leu
               165
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Ile Asp Gln Lys Pro Ile Ser Asn Leu Gly Asn Ile His Ala Ser Asn
                              185
          180
Asn Ile Met Phe Lys Leu Asp Gly Cys Arg Asp Thr His Arg Tyr Ile
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Trp Ile Lys Tyr Phe Asn Leu Phe Asp Lys Glu Leu Asn Glu Lys Glu
                       215
                                           220
Ile Lys Asp Leu Tyr Asp Asn Gln Ser Asn Ser Gly Ile Leu Lys Asp
                   230
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Phe Trp Gly Asp Tyr Leu Gln Tyr Asp Lys Pro Tyr Tyr Met Leu Asn
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Leu Tyr Asp Pro Asn Lys Tyr Val Asp Val Asn Asn Val Gly Ile Arg
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Gly Tyr Met Tyr Leu Lys Gly Pro Arg Gly Ser Val Met Thr Thr Asn
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                                              285
Ile Tyr Leu Asn Ser Ser Leu Tyr Arg Gly Thr Lys Phe Ile Ile Lys
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Lys Tyr Ala Ser Gly Asn Lys Asp Asn Ile Val Arg Asn Asn Asp Arg
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                                      315
Val Tyr Ile Asn Val Val Lys Asn Lys Glu Tyr Arg Leu Ala Thr
               325
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Asn Ala Ser Gln Ala Gly Val Glu Lys Ile Leu Ser Ala Leu Glu Ile
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Pro Asp Val Gly Asn Leu Ser Gln Val Val Val Met Lys Ser Lys Asn
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Asp Gln Gly Ile Thr Asn Lys Cys Lys Met Asn Leu Gln Asp Asn Asn
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Gly Asn Asp Ile Gly Phe Ile Gly Phe His Gln Phe Asn Asn Ile Ala
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                                      395
Lys Leu Val Ala Ser Asn Trp Tyr Asn Arg Gln Ile Glu Arg Ser Ser
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Arg Thr Leu Gly Cys Ser Trp Glu Phe Ile Pro Val Asp Asp Gly Trp
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<223> Synthetic Construct

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tto tgg ggt gac tac ctg cag tac gac aaa ccg tac tac atq ctg aat

Phe	Trp	Gly 240	Asp	Tyr	Leu	Gln	Tyr 245	Asp	Lys	Pro	Tyr	Tyr 250	Met	Leu	Asn	
		gat Asp														819
ggt Gly 270	tac Tyr	atg Met	tac Tyr	ctg Leu	aaa Lys 275	ggt Gly	ccg Pro	cgt Arg	ggt Gly	tct Ser 280	gtt Val	atg Met	act Thr	acc Thr	aac Asn 285	867
atc Ile	tac Tyr	ctg Leu	aac Asn	tct Ser 290	tcc Ser	ctg Leu	tac Tyr	cgt Arg	ggt Gly 295	acc Thr	aaa Lys	ttc Phe	atc Ile	atc Ile 300	aag Lys	915
aaa Lys	tac Tyr	gcg Ala	tct Ser 305	ggt Gly	aac Asn	aag Lys	gac Asp	aat Asn 310	atc Ile	gtt Val	cgc Arg	aac Asn	aat Asn 315	gat Asp	cgt Arg	963
		atc Ile 320														1011
		tct Ser														1059
ccg Pro 350	gac Asp	gtt Val	ggt Gly	aat Asn	ctg Leu 355	tct Ser	cag Gln	gta Val	gtt Val	gta Val 360	atg Met	aaa Lys	tcc Ser	aag Lys	aac Asn 365	1107
		ggt Gly														1155
		gat Asp														1203
	Leu	gtt Val 400			Asn		Tyr	Asn	Arg	Gln		Glu	Arg			1251
		ctg Leu														1299
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<213> Synthetic Construct

<220>

<400> 4

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aat aac atc atg ttc aaa ctg gac ggt tgt cgt gac act cac cgc tac Asn Asn Ile Met Phe Lys Leu Asp Gly Cys Arg Asp Thr His Arg Tyr

														gaa Glu 220		675
_			_	_		_		_						ctg Leu		723
_				_		_	_		_					atg Met	_	771
aat Asn	ctg Leu 255	tac Tyr	gat Asp	ccg Pro	aac Asn	aaa Lys 260	tac Tyr	gtt Val	gac Asp	gtc Val	aac Asn 265	aat Asn	gta Val	ggt Gly	atc Ile	819
														act Thr		867
			_				_		_					atc Ile 300		915
														aat Asn		963
														ctg Leu		1011
														ctg Leu		1059
	_	_	_			_		_	_	_	_	_		tcc Ser	_	1107
	_	_						_		_		_	_	gac Asp 380		1155
														aat Asn		1203
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	ggt Gly	_	_	_	_		gaat	tc								1326

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Tyr Ala Ser Lys Ile Asn Ile Gly Ser Lys Val Asn Phe Asp Pro Ile
                           40
Asp Lys Asn Gln Ile Gln Leu Phe Asn Leu Glu Ser Ser Lys Ile Glu
                       55
Val Ile Leu Lys Asn Ala Ile Val Tyr Asn Ser Met Tyr Glu Asn Phe
                   70
Ser Thr Ser Phe Trp Ile Arg Ile Pro Lys Tyr Phe Asn Ser Ile Ser
               85
                                   90
Leu Asn Asn Glu Tyr Thr Ile Ile Asn Cys Met Glu Asn Asn Ser Gly
          100
                               105
Trp Lys Val Ser Leu Asn Tyr Gly Glu Ile Ile Trp Thr Leu Gln Asp
                          120
                                               125
Thr Gln Glu Ile Lys Gln Arg Val Val Phe Lys Tyr Ser Gln Met Ile
                                         140
                      135
Asn Ile Ser Asp Tyr Ile Asn Arg Trp Ile Phe Val Thr Ile Thr Asn
                   150
                                       155
Asn Arg Leu Asn Asn Ser Lys Ile Tyr Ile Asn Gly Arg Leu Ile Asp
                                   170
               165
Gln Lys Pro Ile Ser Asn Leu Gly Asn Ile His Ala Ser Asn Asn Ile
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                               185
Met Phe Lys Leu Asp Gly Cys Arg Asp Thr His Arg Tyr Ile Trp Ile
      195
                           200
Lys Tyr Phe Asn Leu Phe Asp Lys Glu Leu Asn Glu Lys Glu Ile Lys
                       215
                                           220
Asp Leu Tyr Asp Asn Gln Ser Asn Ser Gly Ile Leu Lys Asp Phe Trp
                   230
                                       235
Gly Asp Tyr Leu Gln Tyr Asp Lys Pro Tyr Tyr Met Leu Asn Leu Tyr
               245
                                   250
Asp Pro Asn Lys Tyr Val Asp Val Asn Asn Val Gly Ile Arg Gly Tyr
                               265
Met Tyr Leu Lys Gly Pro Arg Gly Ser Val Met Thr Thr Asn Ile Tyr
                           280
                                               285
Leu Asn Ser Ser Leu Tyr Arg Gly Thr Lys Phe Ile Ile Lys Lys Tyr
                       295
                                           300
Ala Ser Gly Asn Lys Asp Asn Ile Val Arg Asn Asn Asp Arg Val Tyr
                                       315
                    310
Ile Asn Val Val Lys Asn Lys Glu Tyr Arg Leu Ala Thr Asn Ala
                325
                                   330
Ser Gln Ala Gly Val Glu Lys Ile Leu Ser Ala Leu Glu Ile Pro Asp
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Val Gly Asn Leu Ser Gln Val Val Val Met Lys Ser Lys Asn Asp Gln
                           360
Gly Ile Thr Asn Lys Cys Lys Met Asn Leu Gln Asp Asn Asn Gly Asn
                       375
                                          380
Asp Ile Gly Phe Ile Gly Phe His Gln Phe Asn Asn Ile Ala Lys Leu
                   390
                            395
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Val Ala Ser Asn Trp Tyr Asn Arg Gln Ile Glu Arg Ser Ser Arg Thr

410

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Arg Pro Leu
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Leu Asn Leu Arg Tyr Lys Asp Asn Asn Leu Ile Asp Leu Ser Gly Tyr
ggt gct aaa gtt gaa gta tac gac ggt gtt gaa ctg aat gac aag aac
Gly Ala Lys Val Glu Val Tyr Asp Gly Val Glu Leu Asn Asp Lys Asn
cag ttc aaa ctg acc tct tcc gct aac tct aag atc cgt gtt act cag
                                                                   195
Gln Phe Lys Leu Thr Ser Ser Ala Asn Ser Lys Ile Arg Val Thr Gln
aat cag aac atc atc ttc aac tcc gta ttc ctg gac ttc tct gtt tcc
                                                                   243
Asn Gln Asn Ile Ile Phe Asn Ser Val Phe Leu Asp Phe Ser Val Ser
ttc tqq att cqt atc ccq aaa tac aag aac gac ggt atc cag aat tac
                                                                   291
Phe Trp Ile Arg Ile Pro Lys Tyr Lys Asn Asp Gly Ile Gln Asn Tyr
                         85
atc cac aat gaa tac acc atc atc aac tgc atg aag aat aac tct ggt
                                                                   339
Ile His Asn Glu Tyr Thr Ile Ile Asn Cys Met Lys Asn Asn Ser Gly
                    100
                                         105
tgg aag atc tcc atc cgc ggt aac cgt atc atc tgg act ctg atc gat
                                                                   387
Trp Lys Ile Ser Ile Arg Gly Asn Arg Ile Ile Trp Thr Leu Ile Asp
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                                     120
atc aac ggt aag acc aaa tct gta ttc ttc gaa tac aac atc cgt gaa
                                                                   435
Ile Asn Gly Lys Thr Lys Ser Val Phe Phe Glu Tyr Asn Ile Arg Glu
            130
                                 135
gac atc tct gaa tac atc aat cgc tgg ttc ttc gtt acc atc acc aat
                                                                   483
Asp Ile Ser Glu Tyr Ile Asn Arg Trp Phe Phe Val Thr Ile Thr Asn
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aac ctg aac aat gct aaa atc tac atc aac ggt aaa ctg gaa tct aat
Asn Leu Asn Asn Ala Lys Ile Tyr Ile Asn Gly Lys Leu Glu Ser Asn
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								atc Ile	579
								atg Met 205	627
								gaa Glu	675
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								ggt Gly	771
								gaa Glu	819
_	_			_				tac Tyr 285	 867
								aac Asn	915
								tac Tyr	963
								aag Lys	1011
								gat Asp	1059
								cag Gln 365	1107
								act Thr	1155
								atc Ile	1203
								ctg Leu	1251

gaa gtt aaa cgc aaa ccg tac aac ctg aaa ctg ggt tgc aat tgg cag 1299 Glu Val Lys Arg Lys Pro Tyr Asn Leu Lys Leu Gly Cys Asn Trp Gln ttc atc ccg aaa gac gaa ggt tgg acc gaa tagtaagaat tc 1341 Phe Ile Pro Lys Asp Glu Gly Trp Thr Glu <210> 8 <211> 440 <212> PRT <213> Synthetic Construct <220> <400> 8 Met Ala Asn Lys Tyr Asn Ser Glu Ile Leu Asn Asn Ile Ile Leu Asn 10 Leu Arg Tyr Lys Asp Asn Asn Leu Ile Asp Leu Ser Gly Tyr Gly Ala 2.0 25 Lys Val Glu Val Tyr Asp Gly Val Glu Leu Asn Asp Lys Asn Gln Phe 40 45 Lys Leu Thr Ser Ser Ala Asn Ser Lys Ile Arg Val Thr Gln Asn Gln 55 Asn Ile Ile Phe Asn Ser Val Phe Leu Asp Phe Ser Val Ser Phe Trp 75 70 Ile Arg Ile Pro Lys Tyr Lys Asn Asp Gly Ile Gln Asn Tyr Ile His 90 85 Asn Glu Tyr Thr Ile Ile Asn Cys Met Lys Asn Asn Ser Gly Trp Lys 105 Ile Ser Ile Arg Gly Asn Arg Ile Ile Trp Thr Leu Ile Asp Ile Asn 115 120 Gly Lys Thr Lys Ser Val Phe Phe Glu Tyr Asn Ile Arg Glu Asp Ile 135 140 Ser Glu Tyr Ile Asn Arg Trp Phe Phe Val Thr Ile Thr Asn Asn Leu 150 155 Asn Asn Ala Lys Ile Tyr Ile Asn Gly Lys Leu Glu Ser Asn Thr Asp 170 Ile Lys Asp Ile Arg Glu Val Ile Ala Asn Gly Glu Ile Ile Phe Lys 185 Leu Asp Gly Asp Ile Asp Arg Thr Gln Phe Ile Trp Met Lys Tyr Phe 200 205 Ser Ile Phe Asn Thr Glu Leu Ser Gln Ser Asn Ile Glu Glu Arg Tyr 215 Lys Ile Gln Ser Tyr Ser Glu Tyr Leu Lys Asp Phe Trp Gly Asn Pro 230 235 Leu Met Tyr Asn Lys Glu Tyr Tyr Met Phe Asn Ala Gly Asn Lys Asn 250 Ser Tyr Ile Lys Leu Lys Lys Asp Ser Pro Val Gly Glu Ile Leu Thr 265 Arg Ser Lys Tyr Asn Gln Asn Ser Lys Tyr Ile Asn Tyr Arg Asp Leu 275 280 285 Tyr Ile Gly Glu Lys Phe Ile Ile Arg Arg Lys Ser Asn Ser Gln Ser 295 300 Ile Asn Asp Asp Ile Val Arg Lys Glu Asp Tyr Ile Tyr Leu Asp Phe 310 315

Phe Asn Leu Asn Gln Glu Trp Arg Val Tyr Thr Tyr Lys Tyr Phe Lys

Lys Glu Glu Glu Lys Leu Phe Leu Ala Pro Ile Ser Asp Ser Asp Glu

330

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340
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Leu Tyr Asn Thr Ile Gln Ile Lys Glu Tyr Asp Glu Gln Pro Thr Tyr
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                           360
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Ser Cys Gln Leu Leu Phe Lys Lys Asp Glu Glu Ser Thr Asp Glu Ile
                       375
                                           380
Gly Leu Ile Gly Ile His Arg Phe Tyr Glu Ser Gly Ile Val Phe Glu
                   390
                                       395
Glu Tyr Lys Asp Tyr Phe Cys Ile Ser Lys Trp Tyr Leu Lys Glu Val
               405
                                   410
                                                      415
Lys Arg Lys Pro Tyr Asn Leu Lys Leu Gly Cys Asn Trp Gln Phe Ile
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Pro Lys Asp Glu Gly Trp Thr Glu
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Leu Leu Lys Asp Ile Ile Asn Glu Tyr Phe Asn Asn Ile Asn Asp Ser
15
                    20
                                        25
aag atc ctg tcc ctg cag aac cgt aag aac acc ttg gtc gac acc tcc
                                                                 147
Lys Ile Leu Ser Leu Gln Asn Arg Lys Asn Thr Leu Val Asp Thr Ser
                35
                                    40
ggt tac aac gcc gag gtc tcc gag gag ggt gac gtc cag ctg aac cca
                                                                 195
Gly Tyr Asn Ala Glu Val Ser Glu Glu Gly Asp Val Gln Leu Asn Pro
            50
atc ttc cca ttc gac ttc aag ctg ggt tcc tcc ggt gag gac aga ggt
                                                                 243
Ile Phe Pro Phe Asp Phe Lys Leu Gly Ser Ser Gly Glu Asp Arg Gly
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aag gtc atc gtc acc cag aac gag aac atc gtc tac aac tcc atg tac
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Lys Val Ile Val Thr Gln Asn Glu Asn Ile Val Tyr Asn Ser Met Tyr
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gag tcc ttc tcc atc tcc ttc tgg atc aga atc aac aag tgg gtc tcc
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Glu Ser Phe Ser Ile Ser Phe Trp Ile Arg Ile Asn Lys Trp Val Ser
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aac ttg cca ggt tac acc atc atc gac tcc gtc aag aac aac tcc ggt
Asn Leu Pro Gly Tyr Thr Ile Ile Asp Ser Val Lys Asn Asn Ser Gly
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tgg tcc atc ggt atc atc tcc aac ttc ctg gtc ttc acc ctq aaq caq
Trp Ser Ile Gly Ile Ile Ser Asn Phe Leu Val Phe Thr Leu Lys Gln
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130 135 140

 			gac atc tcc Asp Ile Ser 155	
			gtc acc aac Val Thr Asn	
			ctg atc gac Leu Ile Asp	
			aag acc atc Lys Thr Ile 205	
		Gly Leu Ile	acc tcc gac Thr Ser Asp 220	
			ttc gcc aag Phe Ala Lys 235	
			ttg cag tac Leu Gln Tyr	
			tac aac aag Tyr Asn Lys	
			atg tac gcc Met Tyr Ala 285	
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			atg tac gcc Met Tyr Ala	
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		e Gln Ile Gln	g cca atg aac Pro Met Asn 380	

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Thr Tyr Tyr Ala Ser Gln Ile Phe Lys Ser Asn Phe Asn Gly Glu
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aac atc tcc ggt atc tgt tcc atc ggt acc tac aga ttc cgt ctg ggt
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Asn Ile Ser Gly Ile Cys Ser Ile Gly Thr Tyr Arg Phe Arg Leu Gly
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ggt gac tgg tac aga cac aac tac ttg gtt cca act gtc aag cag ggt
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Gly Asp Trp Tyr Arg His Asn Tyr Leu Val Pro Thr Val Lys Gln Gly
aac tac gcc tcc ttg ctg gag tcc act tcc acc cac tgg gga ttc gtc
Asn Tyr Ala Ser Leu Leu Glu Ser Thr Ser Thr His Trp Gly Phe Val
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cca gtc tcc gag taataggaat tc
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Pro Val Ser Glu
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Leu Ser Leu Gln Asn Arg Lys Asn Thr Leu Val Asp Thr Ser Gly Tyr
Asn Ala Glu Val Ser Glu Glu Gly Asp Val Gln Leu Asn Pro Ile Phe
Pro Phe Asp Phe Lys Leu Gly Ser Ser Gly Glu Asp Arg Gly Lys Val
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Ile Val Thr Gln Asn Glu Asn Ile Val Tyr Asn Ser Met Tyr Glu Ser
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Phe Ser Ile Ser Phe Trp Ile Arg Ile Asn Lys Trp Val Ser Asn Leu
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                                                     110
Pro Gly Tyr Thr Ile Ile Asp Ser Val Lys Asn Asn Ser Gly Trp Ser
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Ile Gly Ile Ile Ser Asn Phe Leu Val Phe Thr Leu Lys Gln Asn Glu
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Asp Ser Glu Gln Ser Ile Asn Phe Ser Tyr Asp Ile Ser Asn Asn Ala
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Pro Gly Tyr Asn Lys Trp Phe Phe Val Thr Val Thr Asn Asn Met Met
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Gly Asn Met Lys Ile Tyr Ile Asn Gly Lys Leu Ile Asp Thr Ile Lys
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Val Lys Glu Leu Thr Gly Ile Asn Phe Ser Lys Thr Ile Thr Phe Glu
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Ile Asn Lys Ile Pro Asp Thr Gly Leu Ile Thr Ser Asp Ser Asp Asn
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Ile Asn Met Trp Ile Arg Asp Phe Tyr Ile Phe Ala Lys Glu Leu Asp

235

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Gly Lys Asp Ile Asn Ile Leu Phe Asn Ser Leu Gln Tyr Thr Asn Val
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Val Lys Asp Tyr Trp Gly Asn Asp Leu Arg Tyr Asn Lys Glu Tyr Tyr
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Met Val Asn Ile Asp Tyr Leu Asn Arg Tyr Met Tyr Ala Asn Ser Arg
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Gln Ile Val Phe Asn Thr Arg Arg Asn Asn Asn Asp Phe Asn Glu Gly
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Tyr Lys Ile Ile Ile Lys Arg Ile Arg Gly Asn Thr Asn Asp Thr Arg
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Val Arg Gly Gly Asp Ile Leu Tyr Phe Asp Met Thr Ile Asn Asn Lys
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Ala Tyr Asn Leu Phe Met Lys Asn Glu Thr Met Tyr Ala Asp Asn His
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Ser Thr Glu Asp Ile Tyr Ala Ile Gly Leu Arg Glu Gln Thr Lys Asp
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Ile Asn Asp Asn Ile Ile Phe Gln Ile Gln Pro Met Asn Asn Thr Tyr
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Tyr Tyr Ala Ser Gln Ile Phe Lys Ser Asn Phe Asn Gly Glu Asn Ile
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Ser Gly Ile Cys Ser Ile Gly Thr Tyr Arg Phe Arg Leu Gly Gly Asp
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Trp Tyr Arq His Asn Tyr Leu Val Pro Thr Val Lys Gln Gly Asn Tyr
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Ser Glu
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Met Pro Phe Asn Ile Phe Ser Tyr Thr Asn Asn Ser Leu Leu Lys Asp
atc atc aac gag tac ttc aac tcc atc aac gac tcc aag atc ttg tcc
Ile Ile Asn Glu Tyr Phe Asn Ser Ile Asn Asp Ser Lys Ile Leu Ser
ttg cag aac aag aag aac gcc ttg gtc gac acc tcc ggt tac aac gcc
Leu Gln Asn Lys Lys Asn Ala Leu Val Asp Thr Ser Gly Tyr Asn Ala
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gag gtc aga gtc ggt gac aac gtc cag ttg aac acc atc tac acc aac
Glu Val Arg Val Gly Asp Asn Val Gln Leu Asn Thr Ile Tyr Thr Asn
gac ttc aag ttg tcc tct tcc ggt gac aag atc atc gtc aac ttg aac
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tgg Trp																387
atc Ile													tgt Cys 140			435
aac Asn																483
													ggt Gly			531
													ggt Gly			579
													atc Ile			627
													atc Ile 220			675
													aac Asn			723
													gag Glu			771
													ctg Leu			819
_								_				_	cgt Arg			867
_					_	_	_	_	_	_			gac Asp 300	_		915
													tcc Ser			963
				_		_			_				ctg Leu		atg Met	1011

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														tcc Ser		1155
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														tgg Trp		1251
ttc Phe 415	tcc Ser	ttc Phe	aag Lys	aac Asn	gcc Ala 420	tac Tyr	act Thr	cct Pro	gtc Val	gcc Ala 425	gtc Val	acc Thr	aac Asn	tac Tyr	gag Glu 430	1299
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	ggt Gly				taa	tagga	aat 1	tc								1374
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Asn Ile Glu Trp Ile Leu Gln Asp Val Asn Arg Lys Tyr Lys Ser Leu
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Ile Phe Asp Tyr Ser Glu Ser Leu Ser His Thr Gly Tyr Thr Asn Lys
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Trp Phe Phe Val Thr Ile Thr Asn Asn Ile Met Gly Tyr Met Lys Leu
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Tyr Ile Asn Gly Glu Leu Lys Gln Ser Gln Lys Ile Glu Asp Leu Asp
                           200
Glu Val Lys Leu Asp Lys Thr Ile Val Phe Gly Ile Asp Glu Asn Ile
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Asp Glu Asn Gln Met Leu Trp Ile Arg Asp Phe Asn Ile Phe Ser Lys
                   230
                                       235
Glu Leu Ser Asn Glu Asp Ile Asn Ile Val Tyr Glu Gly Gln Ile Leu
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Arg Asn Val Ile Lys Asp Tyr Trp Gly Asn Pro Leu Lys Phe Asp Thr
                                265
                                                   270
Glu Tyr Tyr Ile Ile Asn Asp Asn Tyr Ile Asp Arg Tyr Ile Ala Pro
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                                               285
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Glu Ser Asn Val Leu Val Leu Val Gln Tyr Pro Asp Leu Ser Lys Leu
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                                           300
Tyr Thr Gly Asn Pro Ile Thr Ile Lys Ser Val Ser Asp Lys Asn Pro
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                                       315
Tyr Ser Arg Ile Leu Asn Gly Asp Asn Ile Ile Leu His Met Leu Tyr
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Asn Ser Arg Lys Tyr Met Ile Ile Arg Asp Thr Asp Thr Ile Tyr Ala
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Thr Gln Gly Glu Cys Ser Gln Asn Cys Val Tyr Ala Leu Lys Leu
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                                               365
Gln Ser Asn Leu Gly Asn Tyr Gly Ile Gly Ile Phe Ser Ile Lys Asn
                        375
                                            380
Ile Val Ser Lys Asn Lys Tyr Cys Ser Gln Ile Phe Ser Ser Phe Arg
                   390
                                       395
Glu Asn Thr Met Leu Leu Ala Asp Ile Tyr Lys Pro Trp Arg Phe Ser
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Phe Lys Asn Ala Tyr Thr Pro Val Ala Val Thr Asn Tyr Glu Thr Lys
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Thr Leu Asn Asn Ser Ile Pro Phe Lys Leu Ser Ser Tyr Thr Asp Asp
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tcc Ser	ggt Gly	tac Tyr 65	gac Asp	tcc Ser	aat Asn	atc Ile	aac Asn 70	att Ile	aac Asn	ggt Gly	gac Asp	gtg Val 75	tac Tyr	aag Lys	tac Tyr	243
							ggt Gly									291
							tac Tyr									339
aac Asn	ttc Phe	tct Ser	att Ile	tct Ser 115	ttc Phe	tgg Trp	gtc Val	agg Arg	att Ile 120	cct Pro	aac Asn	tac Tyr	gac Asp	aac Asn 125	aag Lys	387
							tac Tyr									435
aac Asn	aac Asn	tcc Ser 145	ggt Gly	tgg Trp	aag Lys	gtc Val	tct Ser 150	ctt Leu	aac Asn	cac His	aac Asn	gag Glu 155	atc Ile	att Ile	tgg Trp	483
acc Thr	ttg Leu 160	caa Gln	gac Asp	aac Asn	gca Ala	ggt Gly 165	att Ile	aac Asn	caa Gln	aag Lys	tta Leu 170	gca Ala	ttc Phe	aac Asn	tac Tyr	531
ggt Gly 175	aac Asn	gca Ala	aac Asn	ggt Gly	att Ile 180	tct Ser	gac Asp	tac Tyr	atc Ile	aac Asn 185	aag Lys	tgg Trp	att Ile	ttc Phe	gtc Val 190	579
			Asn		Arg		ggt Gly	Asp	Ser		Leu	Tyr	Ile		Gly	627
aac Asn	tta Leu	atc Ile	gac Asp 210	caa Gln	aag Lys	tcc Ser	att Ile	tta Leu 215	aac Asn	tta Leu	ggt Gly	aac Asn	att Ile 220	cac His	gtt Val	675
							atc Ile 230									723
			_				att Ile		_	_			_			771
							aac Asn									819
gac	ttc	tgg	ggt	aac	tac	ttg	ctt	tac	gac	aag	gaa	tac	tac	tta	tta	867

Asp	Phe	Trp	Gly	Asn 275	Tyr	Leu	Leu	Tyr	Asp 280	Lys	Glu	Tyr	Tyr	Leu 285	Leu	
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tta Leu	agc Ser	att Ile 305	aac Asn	aac Asn	atc Ile	aga Arg	agc Ser 310	act Thr	att Ile	ctt Leu	tta Leu	gct Ala 315	aac Asn	aga Arg	tta Leu	963
tac Tyr	tct Ser 320	ggt Gly	atc Ile	aag Lys	gtt Val	aag Lys 325	atc Ile	caa Gln	aga Arg	gtt Val	aac Asn 330	aac Asn	tct Ser	tct Ser	act Thr	1011
aac Asn 335	gat Asp	aac Asn	ctt Leu	gtt Val	aga Arg 340	aag Lys	aac Asn	gat Asp	cag Gln	gtc Val 345	tat Tyr	att Ile	aac Asn	ttc Phe	gtc Val 350	1059
gct Ala	agc Ser	aag Lys	act Thr	cac His 355	tta Leu	ttc Phe	cca Pro	tta Leu	tat Tyr 360	gct Ala	gat Asp	acc Thr	gct Ala	acc Thr 365	acc Thr	1107
aac Asn	aag Lys	gag Glu	aag Lys 370	acc Thr	atc Ile	aag Lys	atc Ile	tcc Ser 375	tcc Ser	tct Ser	ggc Gly	aac Asn	aga Arg 380	ttt Phe	aac Asn	1155
caa Gln	gtc Val	gtc Val 385	gtt Val	atg Met	aac Asn	tcc Ser	gtc Val 390	ggt Gly	aac Asn	aac Asn	tgt Cys	acc Thr 395	atg Met	aac Asn	ttt Phe	1203
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att	С															1400
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Gly	Cys	Asn	Asp 210	Thr	Arg	Tyr	Val	Gly 215	Ile	Arg	Tyr	Phe	Lys 220	Val	Phe	
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cct Pro	gac Asp 240	cca Pro	tcc Ser	atc Ile	ctg Leu	aag Lys 245	gac Asp	ttc Phe	tgg Trp	ggt Gly	aac Asn 250	tac Tyr	ctg Leu	ctg Leu	tac Tyr	771
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acc Thr	cag Gln	aac Asn	tcc Ser	aac Asn 275	ttc Phe	ttg Leu	aac Asn	atc Ile	aac Asn 280	cag Gln	cag Gln	aga Arg	ggt Gly	gtc Val 285	tac Tyr	867
		cca Pro														915
gtc Val	att Ile	atc Ile 305	aga Arg	aag Lys	aac Asn	gga Gly	tct Ser 310	act Thr	gat Asp	att Ile	tcc Ser	aac Asn 315	acc Thr	gat Asp	aac Asn	963
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aac Asn	aac Asn	aac Asn 385	ggt Gly	gga Gly	aac Asn	atc Ile	ggt Gly 390	ttg Leu	ttg Leu	ggt Gly	ttc Phe	cac His 395	tcc Ser	aac Asn	aac Asn	1203
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tcc Ser 415	aac Asn	ggt Gly	tgc Cys	ttc Phe	tgg Trp 420	tcc Ser	ttc Phe	atc Ile	tcc Ser	aag Lys 425	gag Glu	cac His	ggt Gly	tgg Trp	cag Gln 430	1299
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Asn Lys Phe Ile Asp Ile Ser Gly Tyr Gly Ser Asn Ile Ser Ile Asn
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Gly Asp Val Tyr Ile Tyr Ser Thr Asn Arg Asn Gln Phe Gly Ile Tyr
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Ser Ser Lys Pro Ser Glu Val Asn Ile Ala Gln Asn Asn Asp Ile Ile
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Tyr Asn Gly Arg Tyr Gln Asn Phe Ser Ile Ser Phe Trp Val Arg Ile
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Pro Lys Tyr Phe Asn Lys Val Asn Leu Asn Asn Glu Tyr Thr Ile Ile
            100
                               105
Asp Cys Ile Arg Asn Asn Asn Ser Gly Trp Lys Ile Ser Leu Asn Tyr
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                           120
Asn Lys Ile Ile Trp Thr Leu Gln Asp Thr Ala Gly Asn Asn Gln Lys
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Leu Val Phe Asn Tyr Thr Gln Met Ile Ser Ile Ser Asp Tyr Ile Asn
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Lys Trp Ile Phe Val Thr Ile Thr Asn Asn Arg Leu Gly Asn Ser Arg
               165
                                    170
Ile Tyr Ile Asn Gly Asn Leu Ile Asp Glu Lys Ser Ile Ser Asn Leu
           180
                               185
Gly Asp Ile His Val Ser Asp Asn Ile Leu Phe Lys Ile Val Gly Cys
                           200
Asn Asp Thr Arg Tyr Val Gly Ile Arg Tyr Phe Lys Val Phe Asp Thr
                       215
                                            220
Glu Leu Gly Lys Thr Glu Ile Glu Thr Leu Tyr Ser Asp Glu Pro Asp
                   230
                                       235
Pro Ser Ile Leu Lys Asp Phe Trp Gly Asn Tyr Leu Leu Tyr Asn Lys
               245
                                   250
Arg Tyr Tyr Leu Leu Asn Leu Leu Arg Thr Asp Lys Ser Ile Thr Gln
                               265
Asn Ser Asn Phe Leu Asn Ile Asn Gln Gln Arg Gly Val Tyr Gln Lys
                           280
Pro Asn Ile Phe Ser Asn Thr Arg Leu Tyr Thr Gly Val Glu Val Ile
                       295
                                           300
Ile Arg Lys Asn Gly Ser Thr Asp Ile Ser Asn Thr Asp Asn Phe Val
                                       315
Arg Lys Asn Asp Leu Ala Tyr Ile Asn Val Val Asp Arg Asp Val Glu
                                   330
Tyr Arg Leu Tyr Ala Asp Ile Ser Ile Ala Lys Pro Glu Lys Ile Ile
                               345
Lys Leu Ile Arg Thr Ser Asn Ser Asn Ser Leu Gly Gln Ile Ile
                           360
Val Met Asp Ser Ile Gly Asn Asn Cys Thr Met Asn Phe Gln Asn Asn
                       375
Asn Gly Gly Asn Ile Gly Leu Leu Gly Phe His Ser Asn Asn Leu Val
                   390
Ala Ser Ser Trp Tyr Tyr Asn Asn Ile Arg Lys Asn Thr Ser Ser Asn
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Gly Cys Phe Trp Ser Phe Ile Ser Lys Glu His Gly Trp Gln Glu Asn
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175					180					185					190	
ctg Leu	gac Asp	cgt Arg	atc Ile	aac Asn 195	tcc Ser	tcc Ser	aac Asn	gac Asp	atc Ile 200	gac Asp	ttc Phe	aag Lys	ctg Leu	atc Ile 205	aac Asn	627
tgt Cys	acc Thr	gac Asp	acc Thr 210	acc Thr	aag Lys	ttc Phe	gtc Val	tgg Trp 215	atc Ile	aag Lys	gac Asp	ttc Phe	aac Asn 220	atc Ile	ttc Phe	675
ggt Gly	cgt Arg	gag Glu 225	ctg Leu	aac Asn	gcc Ala	acc Thr	gag Glu 230	gtc Val	tcc Ser	tcc Ser	ctg Leu	tac Tyr 235	tgg Trp	atc Ile	cag Gln	723
tcc Ser	tcc Ser 240	acc Thr	aac Asn	acc Thr	ctg Leu	aag Lys 245	gac Asp	ttc Phe	tgg Trp	gga Gly	aac Asn 250	cca Pro	ctg Leu	cgt Arg	tac Tyr	771
gac Asp 255	acc Thr	cag Gln	tac Tyr	tac Tyr	ctg Leu 260	ttc Phe	aac Asn	cag Gln	ggt Gly	atg Met 265	cag Gln	aac Asn	atc Ile	tac Tyr	atc Ile 270	819
aag Lys	tac Tyr	ttc Phe	tcc Ser	aag Lys 275	gcc Ala	tcc Ser	atg Met	ggt Gly	gag Glu 280	acc Thr	gcc Ala	cct Pro	cgt Arg	acc Thr 285	aac Asn	867
ttc Phe	aac Asn	aac Asn	gcc Ala 290	gcc Ala	atc Ile	aac Asn	tac Tyr	cag Gln 295	aac Asn	ctg Leu	tac Tyr	ctg Leu	ggt Gly 300	ctg Leu	cgt Arg	915
					gcc Ala											963
					gac Asp											1011
gac Asp 335	gag Glu	tcc Ser	tac Tyr	cgt Arg	gtc Val 340	tac Tyr	gtc Val	ctg Leu	gtc Val	aac Asn 345	tcc Ser	aag Lys	gag Glu	atc Ile	cag Gln 350	1059
acc Thr	cag Gln	ctg Leu	ttc Phe	ctg Leu 355	gcc Ala	cca Pro	atc Ile	aac Asn	gac Asp 360	gac Asp	cct Pro	acc Thr	ttc Phe	tac Tyr 365	gac Asp	1107
gtc Val	ctg Leu	cag Gln	atc Ile 370	aag Lys	aag Lys	tac Tyr	tac Tyr	gag Glu 375	aag Lys	acc Thr	acc Thr	tac Tyr	aac Asn 380	tgt Cys	cag Gln	1155
atc Ile	ctg Leu	tgc Cys 385	gag Glu	aag Lys	gac Asp	acc Thr	aag Lys 390	acc Thr	ttc Phe	gga Gly	ctg Leu	ttc Phe 395	ggt Gly	atc Ile	ggt Gly	1203
aag Lys	ttc Phe 400	gtc Val	aag Lys	gac Asp	tac Tyr	ggt Gly 405	tac Tyr	gtc Val	tgg Trp	gac Asp	acc Thr 410	tac Tyr	gac Asp	aac Asn	tac Tyr	1251
ttc Phe 415	tgt Cys	atc Ile	tcc Ser	cag Gln	tgg Trp 420	tac Tyr	ctg Leu	cgt Arg	cgt Arg	atc Ile 425	tcc Ser	gag Glu	aac Asn	atc Ile	aac Asn 430	1299

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aag ctg cgt ctg gga tgt aac tgg cag ttc atc cca gtc gac gag ggt
Lys Leu Arg Leu Gly Cys Asn Trp Gln Phe Ile Pro Val Asp Glu Gly
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tgg acc gag taataggaat tc
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Trp Thr Glu
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Ile Asp Ser Ser Gly Tyr Gly Ala Thr Met Asn Val Gly Ser Asp Val
                            40
Ile Phe Asn Asp Ile Gly Asn Gly Gln Phe Lys Leu Asn Asn Ser Glu
                        55
Asn Ser Asn Ile Thr Ala His Gln Ser Lys Phe Val Val Tyr Asp Ser
                                        75
Met Phe Asp Asn Phe Ser Ile Asn Phe Trp Val Arg Thr Pro Lys Tyr
                                    90
Asn Asn Asn Asp Ile Gln Thr Tyr Leu Gln Asn Glu Tyr Thr Ile Ile
            100
                                105
Ser Cys Ile Lys Asn Asp Ser Gly Trp Lys Val Ser Ile Lys Gly Asn
                            120
                                                 125
Arg Ile Ile Trp Thr Leu Ile Asp Val Asn Ala Lys Ser Lys Ser Ile
                        135
                                            140
Phe Phe Glu Tyr Ser Ile Lys Asp Asn Ile Ser Asp Tyr Ile Asn Lys
                    150
                                        155
Trp Phe Ser Ile Thr Ile Thr Asn Asp Arg Leu Gly Asn Ala Asn Ile
                165
                                    170
Tyr Ile Asn Gly Ser Leu Lys Lys Ser Glu Lys Ile Leu Asn Leu Asp
            180
                                185
Arg Ile Asn Ser Ser Asn Asp Ile Asp Phe Lys Leu Ile Asn Cys Thr
        195
                            200
                                                 205
Asp Thr Thr Lys Phe Val Trp Ile Lys Asp Phe Asn Ile Phe Gly Arg
                        215
                                            220
Glu Leu Asn Ala Thr Glu Val Ser Ser Leu Tyr Trp Ile Gln Ser Ser
                    230
                                        235
Thr Asn Thr Leu Lys Asp Phe Trp Gly Asn Pro Leu Arg Tyr Asp Thr
                245
                                    250
Gln Tyr Tyr Leu Phe Asn Gln Gly Met Gln Asn Ile Tyr Ile Lys Tyr
                                265
Phe Ser Lys Ala Ser Met Gly Glu Thr Ala Pro Arg Thr Asn Phe Asn
                            280
Asn Ala Ala Ile Asn Tyr Gln Asn Leu Tyr Leu Gly Leu Arg Phe Ile
                        295
                                            300
Ile Lys Lys Ala Ser Asn Ser Arg Asn Ile Asn Asn Asp Asn Ile Val
                    310
                                        315
Arg Glu Gly Asp Tyr Ile Tyr Leu Asn Ile Asp Asn Ile Ser Asp Glu
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Ser Tyr Arg Val Tyr Val Leu Val Asn Ser Lys Glu Ile Gln Thr Gln
                                 345
Leu Phe Leu Ala Pro Ile Asn Asp Asp Pro Thr Phe Tyr Asp Val Leu
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Gln Ile Lys Lys Tyr Tyr Glu Lys Thr Thr Tyr Asn Cys Gln Ile Leu
                        375
                                             380
Cys Glu Lys Asp Thr Lys Thr Phe Gly Leu Phe Gly Ile Gly Lys Phe
                    390
                                         395
Val Lys Asp Tyr Gly Tyr Val Trp Asp Thr Tyr Asp Asn Tyr Phe Cys
                405
                                    410
Ile Ser Gln Trp Tyr Leu Arg Arg Ile Ser Glu Asn Ile Asn Lys Leu
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Arg Leu Gly Cys Asn Trp Gln Phe Ile Pro Val Asp Glu Gly Trp Thr
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Glu
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Met Ala Leu Asn Asp Leu Cys Ile Lys Val Asn Asn Trp Asp Leu Phe
                 5
ttc tcc ccg tct gaa gac aac ttc act aac gac ctg aac aaa ggc gaa
                                                                   96
Phe Ser Pro Ser Glu Asp Asn Phe Thr Asn Asp Leu Asn Lys Gly Glu
             20
gaa atc acc tcc gac act aac atc gaa gct gct gaa gaa aac atc tct
                                                                   144
Glu Ile Thr Ser Asp Thr Asn Ile Glu Ala Ala Glu Glu Asn Ile Ser
ctg gac ctg atc cag cag tac tac ctg act ttc aac ttc gac aac gaa
                                                                   192
Leu Asp Leu Ile Gln Gln Tyr Tyr Leu Thr Phe Asn Phe Asp Asn Glu
                         55
ccg gaa aac atc tcc atc gaa aac ctg tct tcc gac atc atc ggt cag
                                                                   240
Pro Glu Asn Ile Ser Ile Glu Asn Leu Ser Ser Asp Ile Ile Gly Gln
                                         75
ctg gaa ctg atg ccg aac atc gaa cgc ttc ccg aac ggc aag aaa tac
                                                                   288
Leu Glu Leu Met Pro Asn Ile Glu Arg Phe Pro Asn Gly Lys Lys Tyr
                 85
                                     90
gaa ctg gac aaa tac acc atg ttc cac tac ctg cgt gct cag gaa ttc
                                                                   336
Glu Leu Asp Lys Tyr Thr Met Phe His Tyr Leu Arg Ala Gln Glu Phe
                                105
gaa cac ggt aaa tot cgt atc gct ctg act aac toc gtt aac gaa gct
Glu His Gly Lys Ser Arg Ile Ala Leu Thr Asn Ser Val Asn Glu Ala
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ctg Leu	ctg Leu 130	aac Asn	ccg Pro	tct Ser	cgc Arg	gtt Val 135	tac Tyr	acc Thr	ttc Phe	ttc Phe	tct Ser 140	tcc Ser	gac Asp	tac Tyr	gtt Val	432
aag Lys 145	aaa Lys	gtt Val	aac Asn	aaa Lys	gct Ala 150	act Thr	gaa Glu	gct Ala	gct Ala	atg Met 155	ttc Phe	ctg Leu	ggt Gly	tgg Trp	gtt Val 160	480
					gac Asp											528
act Thr	gac Asp	aaa Lys	atc Ile 180	gct Ala	gac Asp	atc Ile	act Thr	atc Ile 185	atc Ile	atc Ile	ccg Pro	tac Tyr	atc Ile 190	ggc Gly	ccg Pro	576
gct Ala	ctg Leu	aac Asn 195	atc Ile	ggt Gly	aac Asn	atg Met	ctg Leu 200	tac Tyr	aaa Lys	gac Asp	gac Asp	ttc Phe 205	gtt Val	ggt Gly	gct Ala	624
ctg Leu	atc Ile 210	ttc Phe	tct Ser	ggc Gly	gct Ala	gtt Val 215	atc Ile	ctg Leu	ctg Leu	gaa Glu	ttc Phe 220	atc Ile	ccg Pro	gaa Glu	atc Ile	672
gct Ala 225	atc Ile	ccg Pro	gtt Val	ctg Leu	ggt Gly 230	acc Thr	ttc Phe	gct Ala	ctg Leu	gtt Val 235	tcc Ser	tac Tyr	atc Ile	gct Ala	aac Asn 240	720
aaa Lys	gtt Val	ctg Leu	act Thr	gtt Val 245	cag Gln	acc Thr	atc Ile	gac Asp	aac Asn 250	gct Ala	ctg Leu	tct Ser	aaa Lys	cgt Arg 255	aac Asn	768
gaa Glu	aaa Lys	tgg Trp	gac Asp 260	gaa Glu	gtt Val	tac Tyr	aaa Lys	tac Tyr 265	atc Ile	gtt Val	act Thr	aac Asn	tgg Trp 270	ctg Leu	gct Ala	816
aaa Lys	gtt Val	aac Asn 275	act Thr	cag Gln	atc Ile	gac Asp	ctg Leu 280	atc Ile	cgt Arg	aag Lys	aag Lys	atg Met 285	aaa Lys	gaa Glu	gct Ala	864
ctg Leu	gaa Glu 290	aac Asn	cag Gln	gct Ala	gaa Glu	gct Ala 295	act Thr	aaa Lys	gct Ala	atc Ile	atc Ile 300	aac Asn	tac Tyr	cag Gln	tac Tyr	912
aac Asn 305	cag Gln	tac Tyr	acc Thr	gaa Glu	gaa Glu 310	gaa Glu	aag Lys	aac Asn	aac Asn	atc Ile 315	aac Asn	ttc Phe	aac Asn	atc Ile	gat Asp 320	960
gac Asp	ctg Leu	tcc Ser	tct Ser	aaa Lys 325	ctg Leu	aac Asn	gaa Glu	tcc Ser	atc Ile 330	aac Asn	aaa Lys	gct Ala	atg Met	atc Ile 335	aac Asn	1008
atc Ile	aac Asn	aaa Lys	ttc Phe 340	ctg Leu	aac Asn	cag Gln	tgc Cys	tct Ser 345	gtt Val	tcc Ser	tac Tyr	ctg Leu	atg Met 350	aac Asn	tct Ser	1056
atg Met	atc Ile	ccg Pro 355	tac Tyr	ggc Gly	gtt Val	aaa Lys	cgc Arg 360	ctg Leu	gaa Glu	gac Asp	ttc Phe	gac Asp 365	gct Ala	tcc Ser	ctg Leu	1104

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aaa gac gct ctg ctg aaa tac atc cgt gac aac tac gqt act ctg atc
                                                                   1152
Lys Asp Ala Leu Leu Lys Tyr Ile Arg Asp Asn Tyr Gly Thr Leu Ile
ggc cag gtt gac cgt ctg aaa gac aag gtt aac aac acc ctg tct act
                                                                   1200
Gly Gln Val Asp Arg Leu Lys Asp Lys Val Asn Asn Thr Leu Ser Thr
                    390
                                        395
gac atc ccg ttc cag ctg tcc aaa tac gtt gac aac cag taa
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Asp Ile Pro Phe Gln Leu Ser Lys Tyr Val Asp Asn Gln
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                                    410
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                                25
Glu Ile Thr Ser Asp Thr Asn Ile Glu Ala Ala Glu Glu Asn Ile Ser
                            40
Leu Asp Leu Ile Gln Gln Tyr Tyr Leu Thr Phe Asn Phe Asp Asn Glu
                        55
Pro Glu Asn Ile Ser Ile Glu Asn Leu Ser Ser Asp Ile Ile Gly Gln
                    70
                                        75
Leu Glu Leu Met Pro Asn Ile Glu Arg Phe Pro Asn Gly Lys Lys Tyr
                85
                                    90
Glu Leu Asp Lys Tyr Thr Met Phe His Tyr Leu Arg Ala Gln Glu Phe
           100
                                105
Glu His Gly Lys Ser Arg Ile Ala Leu Thr Asn Ser Val Asn Glu Ala
                            120
Leu Leu Asn Pro Ser Arg Val Tyr Thr Phe Phe Ser Ser Asp Tyr Val
                        135
                                            140
Lys Lys Val Asn Lys Ala Thr Glu Ala Ala Met Phe Leu Gly Trp Val
                    150
                                        155
Glu Gln Leu Val Tyr Asp Phe Thr Asp Glu Thr Ser Glu Val Ser Thr
                165
                                    170
Thr Asp Lys Ile Ala Asp Ile Thr Ile Ile Ile Pro Tyr Ile Gly Pro
                                185
Ala Leu Asn Ile Gly Asn Met Leu Tyr Lys Asp Asp Phe Val Gly Ala
                            200
                                                205
Leu Ile Phe Ser Gly Ala Val Ile Leu Leu Glu Phe Ile Pro Glu Ile
                        215
                                            220
Ala Ile Pro Val Leu Gly Thr Phe Ala Leu Val Ser Tyr Ile Ala Asn
                    230
                                        235
Lys Val Leu Thr Val Gln Thr Ile Asp Asn Ala Leu Ser Lys Arg Asn
                245
                                    250
Glu Lys Trp Asp Glu Val Tyr Lys Tyr Ile Val Thr Asn Trp Leu Ala
                                265
Lys Val Asn Thr Gln Ile Asp Leu Ile Arg Lys Lys Met Lys Glu Ala
                            280
                                                285
Leu Glu Asn Gln Ala Glu Ala Thr Lys Ala Ile Ile Asn Tyr Gln Tyr
                        295
                                            300
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Asn Gln Tyr Thr Glu Glu Glu Lys Asn Asn Ile Asn Phe Asn Ile Asp

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305
                    310
                                        315
Asp Leu Ser Ser Lys Leu Asn Glu Ser Ile Asn Lys Ala Met Ile Asn
                325
                                    330
Ile Asn Lys Phe Leu Asn Gln Cys Ser Val Ser Tyr Leu Met Asn Ser
                                345
Met Ile Pro Tyr Gly Val Lys Arg Leu Glu Asp Phe Asp Ala Ser Leu
                            360
Lys Asp Ala Leu Leu Lys Tyr Ile Arg Asp Asn Tyr Gly Thr Leu Ile
                        375
Gly Gln Val Asp Arg Leu Lys Asp Lys Val Asn Asn Thr Leu Ser Thr
                    390
                                        395
Asp Ile Pro Phe Gln Leu Ser Lys Tyr Val Asp Asn Gln
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Met Ala Pro Gly Ile Cys Ile Asp Val Asp Asn Glu Asp Leu Phe Phe
atc gct gac aag aac tcc ttc tcc gac gac ttg tcc aag aac gag aga
Ile Ala Asp Lys Asn Ser Phe Ser Asp Asp Leu Ser Lys Asn Glu Arg
             20
atc gag tac aac acc cag tcc aac tac atc gag aac gac ttc cca atc
Ile Glu Tyr Asn Thr Gln Ser Asn Tyr Ile Glu Asn Asp Phe Pro Ile
         35
aac gag ttg atc ttg gac acc gac ttg atc tcc aag atc gag ttg cca
                                                                   192
Asn Glu Leu Ile Leu Asp Thr Asp Leu Ile Ser Lys Ile Glu Leu Pro
     50
                         55
tcc gag aac acc gag tcc ttg act gac ttc aac gtc gac gtc cca gtc
Ser Glu Asn Thr Glu Ser Leu Thr Asp Phe Asn Val Asp Val Pro Val
65
                     70
                                         75
tac gag aag caa cca gct atc aag aag att ttc acc gac gag aac acc
                                                                   288
Tyr Glu Lys Gln Pro Ala Ile Lys Lys Ile Phe Thr Asp Glu Asn Thr
                 85
atc ttc caa tac ctg tac tct cag acc ttc cct ttg gac atc aga gac
Ile Phe Gln Tyr Leu Tyr Ser Gln Thr Phe Pro Leu Asp Ile Arg Asp
            100
                                105
                                                     110
atc tcc ttg acc tct tcc ttc gac gac gcc ctg ctg ttc tcc aac aag
                                                                   384
Ile Ser Leu Thr Ser Ser Phe Asp Asp Ala Leu Leu Phe Ser Asn Lys
        115
gtc tac tcc ttc tcc atg gac tac atc aag act gct aac aag gtc
                                                                   432
Val Tyr Ser Phe Phe Ser Met Asp Tyr Ile Lys Thr Ala Asn Lys Val
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130 135 140

gtc Val 145	gag Glu	gcc Ala	ggt Gly	ttg Leu	ttc Phe 150	gct Ala	ggt Gly	tgg Trp	gtc Val	aag Lys 155	cag Gln	atc Ile	gtc Val	aac Asn	gat Asp 160	480
					aac Asn											528
					cca Pro											576
					aac Asn											624
		_	_		ttc Phe				-	_			_	_		672
_		_	_		tcc Ser 230					_		_			_	720
					ttg Leu											768
					gcc Ala											816
					ggt Gly											864
					atc Ile											912
	Lys		Asn	Ile	aac Asn 310	Ile	Asp		Asn	Asp	Ile					960
					cag Gln											1008
					tac Tyr											1056
					ttc Phe											1104
					aag Lys											1152

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aag tee aag gte aac aag tae ttg aag ace ate atg eea tte gae ttg
Lys Ser Lys Val Asn Lys Tyr Leu Lys Thr Ile Met Pro Phe Asp Leu
                    390
                                        395
tcc atc tac acc aac gac acc atc ttg atc gag atg ttc taa
                                                                   1242
Ser Ile Tyr Thr Asn Asp Thr Ile Leu Ile Glu Met Phe
                405
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Ile Ala Asp Lys Asn Ser Phe Ser Asp Asp Leu Ser Lys Asn Glu Arg
                                25
Ile Glu Tyr Asn Thr Gln Ser Asn Tyr Ile Glu Asn Asp Phe Pro Ile
                            40
Asn Glu Leu Ile Leu Asp Thr Asp Leu Ile Ser Lys Ile Glu Leu Pro
                        55
Ser Glu Asn Thr Glu Ser Leu Thr Asp Phe Asn Val Asp Val Pro Val
Tyr Glu Lys Gln Pro Ala Ile Lys Lys Ile Phe Thr Asp Glu Asn Thr
                                    90
Ile Phe Gln Tyr Leu Tyr Ser Gln Thr Phe Pro Leu Asp Ile Arg Asp
            100
                                105
                                                    110
Ile Ser Leu Thr Ser Ser Phe Asp Asp Ala Leu Leu Phe Ser Asn Lys
        115
                            120
                                                125
Val Tyr Ser Phe Phe Ser Met Asp Tyr Ile Lys Thr Ala Asn Lys Val
                        135
                                            140
Val Glu Ala Gly Leu Phe Ala Gly Trp Val Lys Gln Ile Val Asn Asp
                    150
                                        155
Phe Val Ile Glu Ala Asn Lys Ser Asn Thr Met Asp Lys Ile Ala Asp
                165
                                    170
Ile Ser Leu Ile Val Pro Tyr Ile Gly Leu Ala Leu Asn Val Gly Asn
            180
                                185
Glu Thr Ala Lys Gly Asn Phe Glu Asn Ala Phe Glu Ile Ala Gly Ala
                            200
Ser Ile Leu Leu Glu Phe Ile Pro Glu Leu Leu Ile Pro Val Val Gly
                        215
                                            220
Ala Phe Leu Leu Glu Ser Tyr Ile Asp Asn Lys Asn Lys Ile Ile Lys
                    230
                                        235
Thr Ile Asp Asn Ala Leu Thr Lys Arg Asn Glu Lys Trp Ser Asp Met
                245
                                    250
Tyr Gly Leu Ile Val Ala Gln Trp Leu Ser Thr Val Asn Thr Gln Phe
           260
                                265
Tyr Thr Ile Lys Glu Gly Met Tyr Lys Ala Leu Asn Tyr Gln Ala Gln
                            280
                                                285
Ala Leu Glu Glu Ile Ile Lys Tyr Arg Tyr Asn Ile Tyr Ser Glu Lys
                        295
                                            300
Glu Lys Ser Asn Ile Asn Ile Asp Phe Asn Asp Ile Asn Ser Lys Leu
                    310
                                       315
Asn Glu Gly Ile Asn Gln Ala Ile Asp Asn Ile Asn Asn Phe Ile Asn
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Gly Cys Ser Val Ser Tyr Leu Met Lys Lys Met Ile Pro Leu Ala Val
            340
                                345
Glu Lys Leu Leu Asp Phe Asp Asn Thr Leu Lys Lys Asn Leu Leu Asn
                            360
Tyr Ile Asp Glu Asn Lys Leu Tyr Leu Ile Gly Ser Ala Glu Tyr Glu
                        375
                                            380
Lys Ser Lys Val Asn Lys Tyr Leu Lys Thr Ile Met Pro Phe Asp Leu
                    390
                                        395
Ser Ile Tyr Thr Asn Asp Thr Ile Leu Ile Glu Met Phe
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Met Ser Leu Tyr Asn Lys Thr Leu Asp Cys Arg Glu Leu Leu Val Lys
aac act gac ctg cca ttc atc ggt gac atc agt gac gtg aag act gac
Asn Thr Asp Leu Pro Phe Ile Gly Asp Ile Ser Asp Val Lys Thr Asp
                                 2.5
atc ttc ctg cgt aag gac atc aac gag gag act gag gtg atc tac tac
                                                                   144
Ile Phe Leu Arg Lys Asp Ile Asn Glu Glu Thr Glu Val Ile Tyr Tyr
cca gac aac gtg tca gta gac caa gtg atc ctc agt aag aac acc tcc
                                                                   192
Pro Asp Asn Val Ser Val Asp Gln Val Ile Leu Ser Lys Asn Thr Ser
                         55
                                              60
gag cat gga caa cta gac ctg ctc tac cct agt atc gac agt gag agt
                                                                   240
Glu His Gly Gln Leu Asp Leu Leu Tyr Pro Ser Ile Asp Ser Glu Ser
                     70
                                         75
gag atc ctg cca ggg gag aat caa gtc ttc tac gac aac cgt acc cag
                                                                   288
Glu Ile Leu Pro Gly Glu Asn Gln Val Phe Tyr Asp Asn Arg Thr Gln
                 85
aac gtg gac tac ctg aac tcc tac tac tac cta gag tct cag aag ctg
                                                                   336
Asn Val Asp Tyr Leu Asn Ser Tyr Tyr Tyr Leu Glu Ser Gln Lys Leu
            100
                                105
agt gac aac gtg gag gac ttc act ttc acg cgt tca atc gag gag gct
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Ser Asp Asn Val Glu Asp Phe Thr Phe Thr Arg Ser Ile Glu Glu Ala
                            120
ctg gac aac agt gca aag gtg tac act tac ttc cct acc ctg gct aac
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Leu Asp Asn Ser Ala Lys Val Tyr Thr Tyr Phe Pro Thr Leu Ala Asn
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aag gtg aat gcc ggt gtg caa ggt ggt ctg ttc ctg atg tgq gca aac

Lys 145	Val	Asn	Ala	Gly	Val 150	Gln	Gly	Gly	Leu	Phe 155	Leu	Met	Trp	Ala	Asn 160	
_		_		gac Asp 165						_	-	_	_		-	528
				gat Asp												576
				aac Asn												624
				gtc Val												672
				ggt Gly												720
				aag Lys 245												768
aga Arg	tgg Trp	aag Lys	gac Asp 260	tcc Ser	tac Tyr	gag Glu	tgg Trp	atg Met 265	atg Met	gga Gly	acg Thr	tgg Trp	ttg Leu 270	tcc Ser	agg Arg	816
				ttc Phe												864
				ggt Gly												912
				agc Ser												960
				ctg Leu 325												1008
				cga Arg												1056
				atc Ile												1104
				aac Asn												1152
				ctg Leu												1197

385 390 395

taa 1200

<210> 24 <211> 399

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 24

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Leu Lys Asn Ser Leu Asp Val Lys Ile Ser Glu Ala Met Asn Asn Ile

Asn Lys Phe Ile Arg Glu Cys Ser Val Thr Tyr Leu Phe Lys Asn Met 345 Leu Pro Lys Val Ile Asp Glu Leu Asn Glu Phe Asp Arg Asn Thr Lys 360 Ala Lys Leu Ile Asn Leu Ile Asp Ser His Asn Ile Ile Leu Val Gly

330

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576

Glu Val Asp Lys Leu Lys Ala Lys Val Asn Asn Ser Phe Gln Asn

Lys	Ile	Ser	Asp 180	Val	Ser	Val	Ile	Ile 185	Pro	Tyr	Ile	Gly	Pro 190	Ala	Leu	
aac Asn	atc Ile	ggt Gly 195	aac Asn	tcc Ser	gcc Ala	ctg Leu	aga Arg 200	ggt Gly	aac Asn	ttc Phe	aac Asn	cag Gln 205	gcc Ala	ttc Phe	gcc Ala	624
acc Thr	gcc Ala 210	ggt Gly	gtc Val	gcc Ala	ttc Phe	ctg Leu 215	ctg Leu	gag Glu	ggt Gly	ttc Phe	cca Pro 220	gag Glu	ttc Phe	acc Thr	atc Ile	672
cca Pro 225	gcc Ala	ctg Leu	ggt Gly	gtc Val	ttc Phe 230	acc Thr	ttc Phe	tac Tyr	tcc Ser	tcc Ser 235	atc Ile	cag Gln	gag Glu	aga Arg	gag Glu 240	720
aag Lys	atc Ile	atc Ile	aag Lys	acc Thr 245	atc Ile	gag Glu	aac Asn	tgc Cys	ttg Leu 250	gag Glu	cag Gln	aga Arg	gtc Val	aag Lys 255	aga Arg	768
													tcc Ser 270			816
													tcc Ser			864
													tac Tyr			912
													gag Glu			960
													aac Asn			1008
													aac Asn 350			1056
cca Pro	aag Lys	gtc Val 355	atc Ile	gac Asp	gag Glu	ctg Leu	aac Asn 360	aag Lys	ttc Phe	gac Asp	ctg Leu	aga Arg 365	acc Thr	aag Lys	acc Thr	1104
gag Glu	ctg Leu 370	atc Ile	aac Asn	ctg Leu	atc Ile	gac Asp 375	tcc Ser	cac His	aac Asn	atc Ile	atc Ile 380	ctg Leu	gtt Val	ggt Gly	gag Glu	1152
gtt Val 385	gac Asp	taa														1161

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210 215 220

gtc Val 225	ttc Phe	acg Thr	atc Ile	aag Lys	tcc Ser 230	ttc Phe	ctg Leu	ggt Gly	tcc Ser	tcc Ser 235	gac Asp	aac Asn	aag Lys	aac Asn	aag Lys 240	720
gtc Val	att Ile	aag Lys	gcc Ala	atc Ile 245	aac Asn	aac Asn	gcc Ala	ctg Leu	aag Lys 250	gag Glu	cgt Arg	gac Asp	gag Glu	aag Lys 255	tgg Trp	768
aag Lys	gaa Glu	gtc Val	tat Tyr 260	tcc Ser	ttc Phe	atc Ile	gtc Val	tcg Ser 265	aac Asn	tgg Trp	atg Met	acc Thr	aag Lys 270	atc Ile	aac Asn	816
acc Thr	cag Gln	ttc Phe 275	aac Asn	aag Lys	cga Arg	aag Lys	gag Glu 280	cag Gln	atg Met	tac Tyr	cag Gln	gct Ala 285	ctg Leu	cag Gln	aac Asn	864
cag Gln	gtc Val 290	aac Asn	gcc Ala	atc Ile	aag Lys	acc Thr 295	atc Ile	atc Ile	gag Glu	tcc Ser	aag Lys 300	tac Tyr	aac Asn	tcc Ser	tac Tyr	912
acc Thr 305	ctg Leu	gag Glu	gag Glu	aag Lys	aac Asn 310	gag Glu	ctt Leu	acc Thr	aac Asn	aag Lys 315	tac Tyr	gat Asp	atc Ile	aag Lys	cag Gln 320	960
atc Ile	gag Glu	aac Asn	gag Glu	ctg Leu 325	aac Asn	cag Gln	aag Lys	gtc Val	tcc Ser 330	atc Ile	gcc Ala	atg Met	aac Asn	aac Asn 335	atc Ile	1008
gac Asp	agg Arg	ttc Phe	ctg Leu 340	acc Thr	gag Glu	tcc Ser	tcc Ser	atc Ile 345	tcc Ser	tac Tyr	ctg Leu	atg Met	aag Lys 350	ctc Leu	atc Ile	1056
aac Asn	gag Glu	gtc Val 355	aag Lys	atc Ile	aac Asn	aag Lys	ctg Leu 360	cga Arg	gag Glu	tac Tyr	gac Asp	gag Glu 365	aat Asn	gtc Val	aag Lys	1104
acg Thr	tac Tyr 370	ctg Leu	ctg Leu	aac Asn	tac Tyr	atc Ile 375	atc Ile	cag Gln	cac His	gga Gly	tcc Ser 380	atc Ile	ctg Leu			1146
taa																1149
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)> 28 Ser		Cvc	т16	Gl 11	Tla	λα»	7.~~	01. .	a 1	Т	րե -	Dk -	T7- 7	n T .	
1	Ser			5					10					15		
	Glu		20					25					30			
	Asp	35					40					45				
val	Ile 50	ьeu	ASN	rne	Asn	Ser 55	GLu	Ser	Ala	Pro	Gly 60	Leu	Ser	Asp	Glu	

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Lys Leu Asn Leu Thr Ile Gln Asn Asp Ala Tyr Ile Pro Lys Tyr Asp
Ser Asn Gly Thr Ser Asp Ile Glu Gln His Asp Val Asn Glu Leu Asn
                                    90
Val Phe Phe Tyr Leu Asp Ala Gln Lys Val Pro Glu Gly Glu Asn Asn
                               105
Val Asn Leu Thr Ser Ser Ile Asp Thr Ala Leu Leu Glu Gln Pro Lys
       115
                           120
Ile Tyr Thr Phe Phe Ser Ser Glu Phe Ile Asn Asn Val Asn Lys Pro
                        135
Val Gln Ala Ala Leu Phe Val Ser Trp Ile Gln Gln Val Leu Val Asp
                  150
                                        155
Phe Thr Thr Glu Ala Asn Gln Lys Ser Thr Val Asp Lys Ile Ala Asp
                165
                                    170
Ile Ser Ile Val Val Pro Tyr Ile Gly Leu Ala Leu Asn Ile Gly Asn
            180
                               185
Glu Ala Gln Lys Gly Asn Phe Lys Asp Ala Leu Glu Leu Leu Gly Ala
        195
                           200
Gly Ile Leu Leu Glu Phe Glu Pro Glu Leu Leu Ile Pro Thr Ile Leu
                        215
Val Phe Thr Ile Lys Ser Phe Leu Gly Ser Ser Asp Asn Lys
                   230
                                        235
Val Ile Lys Ala Ile Asn Asn Ala Leu Lys Glu Arg Asp Glu Lys Trp
                245
                                   250
Lys Glu Val Tyr Ser Phe Ile Val Ser Asn Trp Met Thr Lys Ile Asn
            260
                                265
Thr Gln Phe Asn Lys Arg Lys Glu Gln Met Tyr Gln Ala Leu Gln Asn
                            280
Gln Val Asn Ala Ile Lys Thr Ile Ile Glu Ser Lys Tyr Asn Ser Tyr
                        295
Thr Leu Glu Glu Lys Asn Glu Leu Thr Asn Lys Tyr Asp Ile Lys Gln
                   310
                                        315
Ile Glu Asn Glu Leu Asn Gln Lys Val Ser Ile Ala Met Asn Asn Ile
               325
                                   330
Asp Arg Phe Leu Thr Glu Ser Ser Ile Ser Tyr Leu Met Lys Leu Ile
           340
                                345
Asn Glu Val Lys Ile Asn Lys Leu Arg Glu Tyr Asp Glu Asn Val Lys
                           360
Thr Tyr Leu Leu Asn Tyr Ile Ile Gln His Gly Ser Ile Leu
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                5
ttt gtc gct tcc gag tca agc tac aac gag aac gat att aac aca cct
                                                                  96
Phe Val Ala Ser Glu Ser Ser Tyr Asn Glu Asn Asp Ile Asn Thr Pro
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												tac Tyr 45				144
ttg Leu	gat Asp 50	gag Glu	gtt Val	att Ile	ttg Leu	gat Asp 55	tac Tyr	aac Asn	tca Ser	cag Gln	acc Thr 60	atc Ile	cct Pro	caa Gln	att Ile	192
												tcc Ser				240
aga Arg	tac Tyr	gat Asp	tct Ser	aac Asn 85	ggt Gly	acc Thr	tca Ser	gag Glu	atc Ile 90	gag Glu	gag Glu	tat Tyr	gat Asp	gtt Val 95	gtt Val	288
gac Asp	ttt Phe	aac Asn	gtc Val 100	ttt Phe	ttc Phe	tat Tyr	ttg Leu	cat His 105	gcc Ala	cag Gln	aag Lys	gtg Val	cca Pro 110	gaa Glu	ggt Gly	336
												gcc Ala 125				384
gag Glu	tcc Ser 130	aag Lys	gat Asp	atc Ile	ttc Phe	ttt Phe 135	tct Ser	tcg Ser	gag Glu	ttt Phe	atc Ile 140	gat Asp	act Thr	atc Ile	aac Asn	432
aag Lys 145	cct Pro	gtc Val	aac Asn	gcc Ala	gct Ala 150	ctg Leu	ttc Phe	att Ile	gat Asp	tgg Trp 155	att Ile	agc Ser	aag Lys	gtc Val	atc Ile 160	480
												gtt Val				528
												gct Ala				576
att Ile	att Ile	gag Glu 195	gca Ala	gaa Glu	aag Lys	ggt Gly	aac Asn 200	Phe	gag Glu	gag Glu	gct Ala	ttt Phe 205	Glu	ttg Leu	ttg Leu	624
												acc Thr				672
												tac Tyr				720
												gaa Glu				768
												tgg Trp				816

att aac act caa ttt aac aag ag Ile Asn Thr Gln Phe Asn Lys Ar 275	rg Lys Glu G	aa atg tac cag g ln Met Tyr Gln <i>I</i> 285	gct ctg 864 Ala Leu
caa aac caa gtc gat gct atc aa Gln Asn Gln Val Asp Ala Ile Ly 290 295	ag act gca at ys Thr Ala II	tt gaa tac aag t le Glu Tyr Lys : 300	cac aac 912 Tyr Asn
aac tat act tcc gat gag aag aa Asn Tyr Thr Ser Asp Glu Lys As 305 310	sn Arg Leu G	aa tct gaa tac a lu Ser Glu Tyr <i>I</i> 15	aat atc 960 Asn Ile 320
aac aac att gaa gaa gag ttg aa Asn Asn Ile Glu Glu Glu Leu As 325	ac aag aaa gt sn Lys Lys Va 330	al Ser Leu Ala 1	atg aag 1008 Met Lys 335
aat atc gaa aga ttt atg acc ga Asn Ile Glu Arg Phe Met Thr Gl 340	aa too tot at lu Ser Ser I: 345	tc tct tac ttg a le Ser Tyr Leu I 350	atg aag 1056 Met Lys
ttg atc aat gag gcc aag gtt gg Leu Ile Asn Glu Ala Lys Val G 355	gt aag ttg aa ly Lys Leu L 60	ag aag tac gat a ys Lys Tyr Asp 2 365	aac cac 1104 Asn His
gtt aag agc gat ctg ctg aac ta Val Lys Ser Asp Leu Leu Asn Ty 370 375	ac att ctc g yr Ile Leu A	ac cac aga tca sp His Arg Ser 380	atc ctg 1152 Ile Leu
gga gag cag aca aac gag ctg ag Gly Glu Gln Thr Asn Glu Leu Se 385 390	er Asp Leu V	tt act tcc act al Thr Ser Thr 95	ttg aac 1200 Leu Asn 400
tcc tcc att cca ttt gag ctt to Ser Ser Ile Pro Phe Glu Leu Se 405			1227
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Leu Asp Glu Val Ile Leu Asp T		•	Gln Ile
Ser Asn Arg Thr Leu Asn Thr L 65 70	7	75	80
Arg Tyr Asp Ser Asn Gly Thr S 85	Ser Glu Ile G 90	Glu Glu Tyr Asp	Val Val 95
Asp Phe Asn Val Phe Phe Tyr L 100	105	110	_
Glu Thr Asn Ile Ser Leu Thr S	Ser Ser Ile A	Asp Thr Ala Leu	Leu Glu

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120
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Glu Ser Lys Asp Ile Phe Phe Ser Ser Glu Phe Ile Asp Thr Ile Asn
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                        135
Lys Pro Val Asn Ala Ala Leu Phe Ile Asp Trp Ile Ser Lys Val Ile
                   150
                                       155
Arg Asp Phe Thr Thr Glu Ala Thr Gln Lys Ser Thr Val Asp Lys Ile
                                   170
                165
Ala Asp Ile Ser Leu Ile Val Pro Tyr Val Gly Leu Ala Leu Asn Ile
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            180
Ile Ile Glu Ala Glu Lys Gly Asn Phe Glu Glu Ala Phe Glu Leu Leu
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                            200
Gly Val Gly Ile Leu Leu Glu Phe Val Pro Glu Leu Thr Ile Pro Val
                                            220
                        215
Ile Leu Val Phe Thr Ile Lys Ser Tyr Ile Asp Ser Tyr Glu Asn Lys
                                        235
                    230
Asn Lys Ala Ile Lys Ala Ile Asn Asn Ser Leu Ile Glu Arg Glu Ala
                                    250
                245
Lys Trp Lys Glu Ile Tyr Ser Trp Ile Val Ser Asn Trp Leu Thr Arg
                                                    270
                                265
           260
Ile Asn Thr Gln Phe Asn Lys Arg Lys Glu Gln Met Tyr Gln Ala Leu
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                            280
Gln Asn Gln Val Asp Ala Ile Lys Thr Ala Ile Glu Tyr Lys Tyr Asn
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                                            300
Asn Tyr Thr Ser Asp Glu Lys Asn Arg Leu Glu Ser Glu Tyr Asn Ile
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Asn Asn Ile Glu Glu Glu Leu Asn Lys Lys Val Ser Leu Ala Met Lys
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Asn Ile Glu Arg Phe Met Thr Glu Ser Ser Ile Ser Tyr Leu Met Lys
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            340
Leu Ile Asn Glu Ala Lys Val Gly Lys Leu Lys Lys Tyr Asp Asn His
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Val Lys Ser Asp Leu Leu Asn Tyr Ile Leu Asp His Arg Ser Ile Leu
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Gly Glu Gln Thr Asn Glu Leu Ser Asp Leu Val Thr Ser Thr Leu Asn
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Ser Ser Ile Pro Phe Glu Leu Ser
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 gag gat tta ttt ttc ata gct aat aaa gat agt ttt tca aaa gat tta
                                                                    96
 Glu Asp Leu Phe Phe Ile Ala Asn Lys Asp Ser Phe Ser Lys Asp Leu
              20
 gct aaa gca gaa act ata gca tat aat aca caa aat aat act ata gaa
                                                                    144
 Ala Lys Ala Glu Thr Ile Ala Tyr Asn Thr Gln Asn Asn Thr Ile Glu
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35 40 45

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acç Thi	g gtt Val	aat L Asr 275	ı Thr	caa Glr	ı ttt ı Phe	tat Tyr	aca Thi	: Ile	a aaa e Lys	a gaa s Glu	a aga ı Arç	a ato g Met 285	: Туг	aat Asr	gct Ala	864

tta Leu	aat Asn 290	aat Asn	caa Gln	tca Ser	caa Gln	gca Ala 295	ata Ile	gaa Glu	aaa Lys	ata Ile	ata Ile 300	gaa Glu	gat Asp	caa Gln	tat Tyr	912
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gat Asp 385	gaa Glu	gta Val	aat Asn	att Ile	cta Leu 390	Lys	tca Ser	aaa Lys	gta Val	aat Asn 395	Arg	cac His	cta Leu	aaa Lys	gac Asp 400	1200
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65 Asr	, Ile	e Asr	o Ile			l Ty	r Ile	∋ Ьуа	s Gl: 90		r Ala	a Lei	u Ly:	s Ly 95	s Ile	
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Pro	s Sei			e Gl	ı As:	n Le	u Gl: 12	n Le		r As	n Se	r Le [.] 12	u As:		p Ala	
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Lys Gly Val Ile Asp Asp Phe Thr Ser Glu Ser Thr Gln Lys Ser Thr
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Ala Leu Asn Val Gly Asn Glu Thr Ala Lys Glu Asn Phe Lys Asn Ala
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Phe Glu Ile Gly Gly Ala Ala Ile Leu Met Glu Phe Ile Pro Glu Leu
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Ile Val Pro Ile Val Gly Phe Phe Thr Leu Glu Ser Tyr Val Gly Asn
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Lys Gly His Ile Ile Met Thr Ile Ser Asn Ala Leu Lys Lys Arg Asp
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Gln Lys Trp Thr Asp Met Tyr Gly Leu Ile Val Ser Gln Trp Leu Ser
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Asn Arg Tyr Ser Glu Glu Asp Lys Met Asn Ile Asn Ile Asp Phe Asn
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Lys Arg Asp Leu Leu Glu Tyr Ile Asp Thr Asn Glu Leu Tyr Leu Leu
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_		_	_	ttc Phe				-	_					_		483
				atc Ile		-						_	_			531
				atc Ile												579
	_		_	atc Ile 195		_		_			~				_	627
				acg Thr												675
				ggt Gly												723
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				tac Tyr												819
				aac Asn 275												867
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290 295 300

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